## November 20, 2003

CALIFORNIA ENERGY COMMISSION Dockets Office Attention: Dockets 03-IEP-01 1516 Ninth Street, MS-4 Sacramento, California 95814-5512

In the Matter of:

Informational Proceeding and

Preparation of the 2004 Integrated
Energy Policy Report (IEPR) Update

) Docket 03-IEP-01
) NOTICE OF COMMITTEE
) HEARING
)

The Department of Water Resources State Water Project submits the following comments regarding the California Energy Commission's Planning for California's Future Transmission Grid Report.

The CEC Report documents, for a variety of reasons, that an increased transmission expansion has many beneficial consequences. The Department generally concurs. However, consideration must also be given to the need for cost allocation to be based on usage of the grid. The CEC, as well as others, must encourage efficient, economic decisions in investments to the transmission grid and interconnections as well as generation siting. Any plan for growth of the transmission grid must be designed in a manner that does not encourage transmission grid enhancements, or generators to site and construct facilities without considering the cost to consumers.

For instance, in a September 2003 meeting, the Market Surveillance Committee of the California Independent System Operator concluded that a policy which compensates the generation unit owners for all network upgrades that they undertake to interconnect their units, effectively makes them indifferent to the costs to consumers of the network upgrades because suppliers bear no cost associated with upgrades. Consequently, suppliers are likely to construct facilities where they find the lowest new plant construction costs or access to low-cost input fuel, with no concern for the cost to consumers of upgrading the transmission network. Several MSC members felt that this policy could result in a haphazard pattern of transmission expansion that would be more expensive than necessary.

The Department shares this concern and recommends that transmission pricing policies be developed that encourage cost-efficient development of transmission consistent with the Federal Energy Regulatory Commission's market design and transmission pricing policies, and that send proper price signals through application of principles of cost causation.

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In particular, the Department recommends that a plan for transmission expansion that includes upgrades for generation or imports of power should follow incentive pricing in order to further market design policies that generation be sited competitively based on cost efficiency. FERC has found that adoption of a "but for" approach, is consistent with their policy of promoting competitive wholesale markets because it causes the interconnection customer (generators) to face the same marginal cost price signal that it would faced in an efficient, competitive market. Under the "but for" approach, the costs of certain network upgrades may be assigned to the interconnection customer, if those upgrades would not be constructed "but for" the introduction of the new network usage.

Consistent with market principles, the Department further recommends that interconnecting facilities costs should be allocated entirely to the interconnection customers unless and until it is clearly demonstrated that other users benefit from the facilities, at which point the users so benefiting should share the costs *pro rata*. The Department believes that the Regional State Committees, as suggested by FERC in Order 2003, are vital to properly allocate transmission upgrade costs. Accordingly, the Department recommends that CEC assist in creating the RSC in order to develop a standard of transmission expansion based upon the above principles.

Specifically, page 5 of the Report states that:

"New generation and demand management are often considered to be alternatives to transmission - however, these alternatives do not:

- Provide expanded access to developing markets.
- Maintain or enhance grid reliability.
- Expand regional fuel diversity with bi-directional access.
- Insurance against major contingencies."

The Department believes this section of the report is not accurate and should be modified. In fact, the Department does operate the SWP using demand management so that SWP demand-based resources provide enhanced reliability and protection against major contingencies. The Department controls the timing of SWP pumping load through an extensive computerized network. The control system allows the Department to minimize the use of power it purchases by maximizing pumping during off-peak periods, when power usage in the market is lower - usually at night - and by providing power to other utilities during on-peak periods, when power usage is high. By taking advantage of this flexibility in scheduling SWP pumping load and generation, the net result is enhanced system reliability and insurance against major contingencies.

The Department further believes that it is important for CEC to recognize that Remedial Action Systems are and will remain an important alternative in providing transmission capacity. SWP's load management provides significant support, when it is

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consistent with water management obligations. For example, SWP provides a Remedial Action System, in which a Pacific Gas and Electric Company automatic controller may instantaneously adjust SWP load and/or generation in response to certain outages. This RAS enabled PG&E to upgrade the rating on Path 15 and Path 66.

SWP provides protection to other loads from frequency decay. In accordance with operations under the existing contracts, SWP's pumping loads' protection devices respond at a more sensitive, higher frequency in times of frequency decay on the transmission system. SWP's pump loads drop at 59.3 Hertz, while other firm load protection settings are less sensitive, dropping at lower frequencies. The Western Electricity Coordinating Council does not require firm load to be shed until frequency drops to 59.1 Hertz. Therefore, other firm loads can stay on line.

SWP loads reduce the ISO's Voltage Support Requirements. The ISO Tariff requires that loads directly interconnected to the ISO-controlled grid (as most SWP loads are) must operate within a power factor bandwidth of 0.97 lag to 0.99 lead. SWP loads are set to operate at unity power factor. This means that SWP's loads do not use reactive power in normal operations and thus their operation does not impose Voltage Support requirements on the system. Additionally, some SWP loads can be called upon to provide dynamic voltage support from its large synchronous pump motors.

Thank you again for the effort the CEC has put into developing the Report and the opportunity to provide comments. Should you have any questions please call me at (916) 574-0670.

Sincerely,

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